

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-148824

(43)Date of publication of application : 21.05.2003

(51)Int.Cl. F25B 9/00

B01D 53/26

F24F 3/14

(21)Application number : 2001-347051

(71)Applicant : DAIKIN IND LTD

(22)Date of filing : 13.11.2001

(72)Inventor : KURIHARA TOSHIYUKI

SAKAMOTO RYUICHI

YOSHIMI MANABU

ODO KOREHIRO

BOKU HARUSHIGE

(54) AIR CONDITIONER

(57)Abstract:

PROBLEM TO BE SOLVED: To realize the operation of high efficiency over a wide operating range by solving the failure in matching between a compressor and an expander in an air conditioner utilizing the air cycle.

SOLUTION: An air cycle part 1 comprises a first compressor 3 and a second compressor 4 to compress the air in two stages. The expander 5 is connected coaxially with the second compressor 4. The first compressor 3 and the expander 5 are independently controlled.

